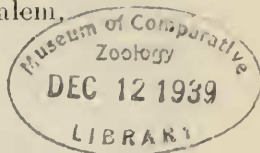


NEW AMATIDAE FROM ASIA.

By H. BYTINSKI-SALZ, Ph.D., F.R.E.S., Jerusalem.

(Plate X.)

13,820

*Callitomis dimorpha* sp. nov.

♂: Antennae simple and pubescent. Frons, thorax and abdomen orange yellow, segments 5 to 7 of the latter black at the base. Wings broad, semihyaline, dull black. Spots orange yellow, very variable as in *C. syntomoides*, Btlr. In the forewing the male type lacks the basal spot; lower medial spot small, occupying only half of the space between vein 1 and 2. Discal spot obsolete; two submarginal spots between veins 4/5 and 5/6. Hindwing with the subbasal spot orange yellow, much larger than in *C. syntomoides*. Submarginal spot large.

♀: Frons, thorax and abdomen black. Segments 1 and 5 of the abdomen with yellow bands, the latter closed below. Wings broad, semihyaline, dull black with orange yellow spots. In the type the subbasal spot absent, the lower medial spot small as in the male. Discal spot very large, rectangular, elongated in the direction of the cell. Of the two submarginal spots the upper one smaller than the lower. In the ♀ paratype the lower medial spot dotlike, the discal spot also small and from the two submarginal spots only the lower present. Submarginal spots small, very inconspicuous.

Holotype: ♂, 25 mm. span, Armenia, Agri Dagh, 2500-3000 m., VII.1935, leg. Kotsch.

Allotype: ♀, 25 mm. span, Armenia, Agri Dagh, 2500-3000 m., VII.1935, leg. Kotsch.

Paratype: ♀, 19 mm. span, Armenia, Aktash, 2800 m., 10-20.VI.1935, leg. Kotsch.

Callitomis dimorpha, By.-S., f. **nigerrima** f. nov.

One male has no markings whatever on both wings. They are entirely semihyaline, dull black.

Holotype: ♂, 19 mm. span, Armenia, Agri Dagh, 2500-3000 m., VII.1935, leg. Kotsch.

This new species is the western representative of a genus which has its distribution mainly in India and the Malayan region. The nearest species known, *C. syntomoides*, Btlr. flies in the Sind Valley, Kashmir, and the N.W. Himalayas. *C. dimorpha* is of special interest for its sexual dimorphism, the ♂♂ having orange yellow body, the ♀♀ a black one with two yellow stripes on the abdomen. Furthermore, the ♂♂ have a large subbasal spot on the hindwing which the ♀♀ lack. *C. dimorpha* differs from the nearest *C. syntomoides* by the yellow abdomen and the larger subbasal spot in the hindwing of the ♂ and the large discal spot in the ♀. Perhaps this new species is also near the "*Amata*" *xanthograpt*, Hmps. (*Cat. Lepid. Phalaena Suppl.*, Vol. I, p. 32, Plate III, fig. 6) from Kashmir, which according to its broad shape of the wings seems to me to belong also to *Callitomis*. *C. dimorpha* differs from this species by its smaller size (19-25 mm. instead of 28 mm.), by the abdomen which is designed in the *xanthograpt* ♂ as in the *dimorpha* ♀, i.e., black with two yellow bands, but perhaps Hampson's type was a ♀? Assuming this, the *dimorpha* ♀ differs from Hampson's figure 6 by the

lack of the subbasal spots and by the lower medial and the submarginal spots, which are much smaller. It may be worth mentioning that *C. dimorpha* has two pairs of spurs on the hind tibiae, whereas Hampson in *The Fauna of British India, Moths*, Vol. I, p. 209, gives as distinctive character between *Syntomis* and *Callitomis* the presence of 2 pairs of spurs in the former and in the latter one pair of spurs on the hind tibiae. I have not examined any other species of *Callitomis*, but judging from f. 139 on p. 224 of the same work, which shows distinctly 2 pairs of spurs, it seems to me that *C. syntomoides* has also 2 pairs like *C. dimorpha*.

Amata susa sp. nov.

♀: Tips of the antennae black, not grey as in *A. bactriana*, Ersch. All hyaline blotches enlarged and increased. Spot 1 drawn out to a point against the base, outer margin oblique and not straight as in *bactriana*. Spot 3 rectangular, straight on the inner and outer side, not oval as in *bactriana*. Above and below two accessory spots. The lower one can be drawn out towards the base. Spot 4 also with two accessory spots below and above, considerably larger than in *bactriana*. Spot 5 divided by vein 4, the upper one elongated towards the cell. Between spot 4 and 5 only a narrow bridge of black. Hind wing with a very large white spot almost reaching the hind margin and extending above vein 3, that is much more dorsally than in *bactriana*.

Holotype ♀, 42 mm. span, Kasakstan, Targaïsk, Kan-dyk-tan, 1400 m., July.

Paratype: ♀, 37 mm. span, Kasakstan, Targaïsk, Kan-dyk-tan, 1400 m., July.

A. susa comes nearest to the f. *repicta*, Trti. of *A. bactriana*, Ersch. It differs from this species by the dark tips of the antennae, the shape of spots 1 and 3, and especially by the enormous size of these, which let the dark interspace between the spots 2, 3, 4, and 5 appear as a dark blotch on light background, especially in the holotype.

Amata wiltshirei sp. nov.

Head and thorax black, tegulae, pectus and legs yellow, tarsi black. Abdomen with yellow patches on the 1st and 2nd segment, yellow rings on the 3rd, 4th, and 5th, but only the last one closed on the ventral side. Dorsal yellow patch on the 7th segment. Wings cream yellow with reduced black markings. Costa, termen, inner margin up to vein 1 and all veins of the forewing black. Cell yellow, a black transverse streak from below the middle of the cell to the hind margin, sometimes interrupted (fig. 4). A black mark along the discal vein extending into a triangular spot along vein 3. A black bar from the cell into the interspace of veins 5 and 6 never reaching the blank termen. Termen with a black tooth along vein 2 and sometimes also along vein 3, nearly confluent with the elongated spot below the disc (fig. 4). Hindwing with the veins hyaline and the termen on the outer margin black. A large black tooth along vein 2, and 2 little teeth along veins 3 and 5.

Cotypes: A series of ♂♂ (span from 30-36 mm.) from Rayat Kurdistan, Iraq, 24.VI-14.VII.1935, taken by E. P. Wiltshire in coll. Wiltshire, Daniel, and coll. mea.

It is not possible to place this striking new Amatid in Hampson's system (Vol. I, p. 78) as it has 5 or (with the mark on the 7th segment) 6 abdominal bands and head and thorax black. It may conveniently be placed near *A. persica*, Kell. but its general aspect is quite different. *A. persica* is a black species with 5 hyaline spots, while *A. wiltshirei* is a hyaline species with a few black bars. I saw a fresh specimen of *A. persica* taken by Mr Fred Brandt near Shiraz which absolutely agrees with the type figured in Hampson's *Catalogue*, Vol. I, Pl. IV, No. 5. There can be no doubt that *persica* is a good species which varies little. Also *wiltshirei* varies little and the two specimens figured on the plate are about the extremes of variation. They concern the extension of the termen along vein 2 and 3 and the rupture of the cross bar below the cell.

Amata sinana sp. nov.

Antennae ciliated, black with white tips; head black; frons, base of the collar, and thorax yellow; tegulae black, yellowish at their base. Pro- and metathorax with lateral yellow spots. Abdomen with 6 yellow bands, the last 5 ones completely closed below. Tip of the abdomen black; first joint of the hind tarsi whitish.

Forewing blackish brown with a small orange yellow spot at the base. Hyaline spots very large, slightly yellow; the first quadrangular, the second large, truncate, filling almost the entire cell. The subcellular rhomboid touching veins 1, 2 and the cell. Subterminal blotches very large, the lower heart-shaped between veins 3 and 5 and divided by the black vein 4, the apical one between veins 6 and 8 triangular. Hindwing with the hyaline blotch very large, from vein 1 to 4, its outer edge incised on vein 2.

Holotype: ♂, span 35 mm., Szechuan, Ginfu Shan, 4.VIII.1930, leg. Friedrichs.

Allotype: ♀, span 38 mm., Tibet, Menia, Hotshu-River, 2500-3000 m., June-August.

Paratype: ♂, span 38 mm., Tibet, Menia, Hotshu-River, 2500-3000 m., June-August.

A. sinana comes nearest to *A. berinda*, Moore but differs by having all hyaline spots much larger, by having the discal spot elongated and not quadrate, and by the huge hyaline patch in the hindwing which fills out more than the dorsal 2/3 of the wing. *A. sinana* seems to resemble much *A. jankowskii*, Rothsch. from Southern and Central China, but has the frons yellow and not black, the tegulae not entirely yellow and the 5th abdominal ring closed below, while in *jankowskii*. segments 4 and 5 reach only the ventral side.

Amata sperbius, F. ssp. **septentrionalis** ssp. nov.

The type form of *A. sperbius*, F. has been described from "East Indies," the type of *A. atkinsoni*, Moore, from Moulmein, Tenasserim.* I have a series of *sperbius* from Kwantung, S. China, which agree equally

*In *P.Z.S.* (1878), 845, Moore recorded *Syntomis atkinsoni* from "Above Ahsown; Naththoung to Paboga," in Upper Tenasserim, but *S. atkinsoni* was originally described by Moore (*P.Z.S.* (1871), 245-346, pl. 18, f. 2) from Yunnan.—T. B. F.

well with the description given by Hampson (*Catalogue Phal.*, Vol. I, p. 106), which is based on the examination of Fabricius' type made by Aurivillius, and the figure of Moore's *A. atkinsoni*.

Specimens from Western China and Tibet differ remarkably from the type form by the absence of the hyaline spot above vein 7. Hyaline patch on the hindwing very large with a large spot above vein 2 reaching even into the cell. Below vein 1 a large stout tooth from the black margin into the hyaline area. Base and inner margin only narrow and slightly yellowish.

Holotype: ♂, 25 mm. span, S.E. Szechuan, Ginfu Shan, 5.VIII.1930, leg. Friedrichs.

Allotype: ♀, 22 mm. span, Szechuan, Mountains near Ning yen fu.

Paratype: 1 ♂, Tibet, Menia, Hotshu-River, 2500-300 m., June-August.

Amata sperbius, F. ssp. **gressitti** ssp. nov.

Forewing as in *A. sperbius*, F., with the spot above vein 7 always present. Hindwing with the hyaline patch much reduced, occupying less than the inner half of the wing; outer border straight. The anal two-thirds of the patch richly coloured with bright yellow.

This form has already been noted as different by Seitz in *Indoaustralische Spinner und Schwärmer*, p. 68, but not named. It represents undoubtedly a valid subspecies.

Cotypes: 2 ♂, 1 ♀, 24-28 mm. span, Hainan, Nodoo, 30.V.1935, leg. L. Gressitt.

Amata compta, Wlkr. f. **szechuana** f. nov.

Differs from the description and figure given by Hampson (*Cat.*, Vol. I, p. 99, pl. V, fig. 1) from Assam, Khasi Hills, by its more yellowish ground colour. All black marks more pronounced, especially on the veins; apex and bar between veins 5 and 6 broader black. On both wings an extremely large black tooth along vein 2, which in Hampson's figure is feebly indicated on the forewing.

Holotype: 1 ♀, 40 mm. span, Szechuan, Ginfu Shan, 1800 m., 20.V.1930, leg. Friedrichs.

Amata menia sp. nov.

Nearest to *A. compta*. Tips of the antennae white; frons, collar, tegulae, ventral side of the thorax and tarsi orange. Black designs similar to *A. compta* but less broad on the apex. Cross vein above vein 6 broader black. Black margin narrow, very little enlarged on vein 2. Inner margin entirely black up to vein 1, whereas in *compta* only the basal half is black. Fringes below the apex white. Hindwing with a narrow black termen.

Holotype: ♂, 37 mm. span, Tibet, Menia, Hotshu-River, 2500-300 m. June-August.

Allotype: ♀, 37 mm. span, Tibet, Menia, Hotshu-River, 2500-300 m. June-August.

Paratype: 1 ♂, 37 mm. span, Tibet, Menia, Hotshu-River, 2500-300 m. June-August.

EXPLANATION OF PLATE X.

1. *Amata susa*, sp. nov. ♀ Holotype.
2. *Amata susa*, sp. nov. ♀ Paratype.
3. *Amata wiltshirei*, sp. nov. ♂ Cotype.
4. *Amata wiltshirei*, sp. nov. ♀ Cotype.
5. *Amata sperbius*, ssp. *gressitti*, ssp. nov. ♂ Cotype.
6. *Amata sperbius*, ssp. *gressitti*, ssp. nov. ♀ Cotype.
7. *Amata sperbius*, ssp. *septentrionalis*, ssp. nov. ♂ Holotype.
8. *Amata sperbius*, ssp. *septentrionalis*, ssp. nov. ♀ Allotype.
9. *Amata sinana*, sp. nov. ♂ Holotype.
10. *Amata compta*, f. *szechuana*, f. nov. ♀ Holotype.
11. *Amata menta*, sp. nov. ♂ Holotype.
12. *Amata menta*, sp. nov. ♀ Allotype.
13. *Callitomis dimorpha*, sp. nov. ♂ Holotype.
14. *Callitomis dimorpha*, sp. nov. ♀ Allotype.
15. *Callitomis dimorpha*, f. *nigerrima*, f. nov. Holotype.

LIST OF TRYPETIDAE (DIPTERA) TAKEN IN NORTH KENT.

By H. W. ANDREWS, F.R.E.S.

This list makes no pretence of being complete and consists solely of such species as I have captured or bred in the course of collecting in my home district. This district is bounded on the North by the R. Thames; on the West by the county boundary between Kent and Surrey; and on the South by the line of chalk downs to Wrotham, then eastwards to Rochester and the R. Medway. It includes marshlands, woodlands, and chalk downs.

In view of the attractive appearance of Trypetids and the fact that the majority of species can be collected in their early stages and bred, it is a pity that there is no up-to-date work in English on the family. As regards the early stages, however, there is a recent paper by Mr Niblett, of outstanding value, giving the food plants, where known, of all our recorded British species, and also those of a number of species, hitherto unrecorded as British, but whose food plants occur in this country. Local Lists of *Trypetidae* have been published by Mr Audcent (Bristol District); Mr Hamm (Oxford District); Mr Saunt (Warwickshire); and Mr Thornley (Cornwall); and I have put the initials A., H., S., and T. against such N. Kent species as are also recorded in their Lists. In a brief bibliography at the end of this paper I give details of these Lists and of some other works dealing with Trypetids.

The following diagnosis of the family is quoted from "Bristol Diptera" by kind permission of Mr Audcent:—"Medium to small flies, mostly with banded or latticed wings. Costa with two breaks, one at apex of humeral cross vein, the other further from base about where subcostal should end: second longitudinal vein (R_1) often turned up suddenly at apex. Two basal cells, the lower one often prolonged to a point along the anal vein: a row of fronto-orbital bristles close to the eye; no preapical bristle on tibiae. Female ovipositor long (as a rule). Larvae live in plants, some forming galls in stems and flowerheads, others mining stems and leaves."

The nomenclature and arrangement of this List follows that of Mr Niblett's paper.